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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/905,215      | 07/13/2001  | John Border          | PD-201021           | 3866             |

7590 12/13/2005

Hughes Electronics Corporation  
Patent Docket Administration  
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| EXAMINER |
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HOFFMAN, BRANDON S

| ART UNIT | PAPER NUMBER |
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2136

DATE MAILED: 12/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                       |                                      |  |
|------------------------------|---------------------------------------|--------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>09/905,215  | <b>Applicant(s)</b><br>BORDER ET AL. |  |
|                              | <b>Examiner</b><br>Brandon S. Hoffman | <b>Art Unit</b><br>2136              |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 27 September 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-10, 14-19, 21-25, 29-39, 43-53 and 57 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.

- 6) ☒ Claim(s) 1-10, 14-19, 21-25, 29-39, 43-53 and 57 is/are rejected.

- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.

- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

1. Claims 1-10, 14-19, 21-25, 29-39, 43-53, and 57 are pending in this action.  
Claims 11-13, 26-28, 40-42, and 54-56 are canceled.

### *Rejections*

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Claim Rejections - 35 USC § 103***

3. Claims 1-10, 15-19, 21-25, 30-39, and 44-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takagi et al. (EP 0 903 905 A2) in view of Baras et al. ("Fast Asymmetric Internet Over Wireless Satellite-Terrestrial Networks," November 3, 1997), and further in view of Jorgensen (U.S. PG PUB No. 2002/0099854).

Regarding claims 1, 15, 30, and 44, Takagi et al. teaches a method/system/apparatus/computer-readable medium for routing information in a communication system that includes a platform and a spoofing apparatus configured to perform a plurality of performance enhancing functions over connections established within the communication system, the method comprising:

- Receiving the information from the platform (paragraph 0077);

- Receiving one or more spoofing parameters and a spoofing selection parameter for specifying a rule for applying the spoofing parameters (paragraph 0099),
- Wherein the spoofing parameters include information for specifying whether spoofing is enabled for a selected one of the connections (abstract and paragraph 0235-0238) and for priority information specifying priority treatment of the selected connection (paragraph 0134-0137),
- Wherein the spoofing apparatus maintains a profile that contains the spoofing selection parameter and the spoofing parameters (paragraph 0099, the routing information and relay method are stored in an embodiment of figure 6 and figure 7), and
- Routing the information in accordance with the profile (paragraph 0099, the routing information is stored in the embodiment of figure 6).

Takagi et al. does not teach the presence of a spoofing apparatus with spoofing parameters or **the profile including a maximum segment size, compensating for maximum segment size mismatch between the selected connection and a connection to an end host by dynamically resizing, based on the profile, data segments which comprises the information before forwarding the data segments to the end host.** Instead, there exist relay parameters.

Baras et al. teaches the use of a spoofing apparatus with spoofing parameters (page 375, 'TCP Spoofer Kernel').

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to combine using a spoofing apparatus with spoofing parameters, as taught by Baras et al., with the method/system/apparatus/computer-readable medium of Takagi et al. It would have been obvious for such modifications because spoofing reduces bandwidth consumption and provides an enhanced network experience.

The combination of Takagi et al. in view of Baras et al. still does not teach **the profile including a maximum segment size, or compensating for maximum segment size mismatch between the selected connection and a connection to an end host by dynamically resizing, based on the profile, data segments which comprises the information before forwarding the data segments to the end host.**

Jorgensen teaches **the profile including a maximum segment size** (paragraph 0434); and **compensating for maximum segment size mismatch between the selected connection and a connection to an end host by dynamically resizing, based on the profile, data segments which comprises the information before forwarding the data segments to the end host** (paragraph 0364).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to combine a profile with a maximum segment size and dynamically resizing the segment size to match the selected connection with the end

host, as taught by Jorgensen, with the method/system/apparatus/computer-readable medium of Takagi et al./Baras et al. It would have been obvious for such modifications because dynamic resizing helps aid in controlling the amount of unacknowledged data in transit (see paragraph 0364 of Jorgensen).

Regarding claims 2, 16, 31, and 45, the combination of Takagi et al. in view of Baras et al./Jorgensen teaches further comprising determining a path that the information takes to reach its destination based on the profile (see page 376, first full paragraph, 'TCP port numbers are used to select the path' of Baras et al.).

Regarding claims 3, 17, 32, and 46, the combination of Takagi et al. in view of Baras et al./Jorgensen teaches further comprising determining the path by applying spoofing rules (see fig. 6/7 of Takagi et al.).

Regarding claims 4, 18, 33, and 47, the combination of Takagi et al. in view of Baras et al./Jorgensen teaches wherein the path is determined based on connection control blocks (see page 375, Data Structures, 'Connection Control Block' of Baras et al.).

Regarding claims 5, 19, 34, and 48, the combination of Takagi et al. in view of Baras et al./Jorgensen teaches wherein connection control blocks are allocated using a hash function (see page 375, Data Structures, 'CBC Hash Table' of Baras et al.).

Regarding claims 6, 21, 35, and 49, the combination of Takagi et al. in view of Baras et al./Jorgensen teaches wherein connection control blocks are allocated using a mapping table (see page 375, Data Structures, 'tables used for CCB' of Baras et al.).

Regarding claims 7, 22, 36, and 50, the combination of Takagi et al. in view of Baras et al./Jorgensen teaches wherein the spoofing rules are mapped to the profile (see fig. 6/7 of Takagi et al., the rules are mapped in the gateway device).

Regarding claims 8, 23, 37, and 51, the combination of Takagi et al. in view of Baras et al./Jorgensen teaches further comprising receiving the at least one of spoofing selection parameters and spoofing parameters as a data structure from the platform (see page 375, 'Data Structures' of Baras et al. and fig. 6 of Takagi et al.).

Regarding claims 9, 24, 38, and 52, the combination of Takagi et al. in view of Baras et al./Jorgensen teaches further comprising receiving at least one of spoofing selection parameters and spoofing parameters from the platform at startup or when the platform receives updated spoofing selection or spoofing parameters (see page 375, 'Data Structures' of Baras et al., a CCB is created for each new connection).

Regarding claims 10, 25, 39, and 53, the combination of Takagi et al. in view of Baras et al./Jorgensen teaches further comprising applying multiple spoofing rules using

boolean operators (see fig. 6/7 of Takagi et al., any combination of multiple rules will use Boolean operators to AND/OR the rules).

Claims 14, 29, 43, and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takagi et al. (EP 0 903 905 A2) in view of Baras et al. ("Fast Asymmetric Internet Over Wireless Satellite-Terrestrial Networks," November 3, 1997), and Jorgensen (USPGPUB 2002/0099854), and further in view of Srinivas (U.S. Patent No. 6,823,387).

Regarding claims 14, 29, 43, and 57, the combination of Takagi et al. in view of Baras et al./Jorgensen teaches all the limitations of claims 1, 15, 30, and 44, above. However, the combination of Takagi et al. in view of Baras et al./Jorgensen does not teach wherein the profile further includes a parameter for disabling three-way handshake spoofing.

Srinivas teaches wherein the profile further includes a parameter for disabling three-way handshake spoofing (fig. 3 and col. 8, lines 25-62).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to combine a parameter for disabling three-way handshake spoofing, as taught by Srinivas, with the method of Takagi et al./Baras et al./Jorgensen.



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It would have been obvious for such modifications because disabling the three-way handshake saves on server resources (see col. 8, line 50 of Srinivas).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon S. Hoffman whose telephone number is 571-272-3863. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R. Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Brandon S. Hoffman*

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*12/18/05*